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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,884

09/08/2005

Catherine Rosemary Martin

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110 7590 12/19/2006
DANN, DORFMAN, HERRELL & SKILLMAN
1601 MARKET STREET
SUITE 2400
PHILADELPHIA, PA 19103-2307

EXAMINER

KUMAR, VINOD

ART UNIT

PAPER NUMBER

1638

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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31 DAYS

12/19/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/518,884

Applicant(s)

MARTIN ET AL.

Examiner

Vinod Kumar

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-35 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-13, 17-25 drawn to an isolated nucleic acid, a recombinant vector, a host cell, a transgenic plant or a method of making said transgenic plant comprising said nucleic acid, or wherein said nucleic acid is SEQ ID NO: 3.

Group II, claim(s) 1-13, 17-25 drawn to an isolated nucleic acid, a recombinant vector, a host cell, a transgenic plant or a method of making said transgenic plant comprising said nucleic acid, or wherein said nucleic acid is SEQ ID NO: 4.

Group III, claim(s) 14-16, drawn to a method for identifying, cloning or determining the presence of a nucleic acid sequence, or wherein said nucleic acid is SEQ ID NO: 3.

Group IV, claim(s) 14-16, drawn to a method for identifying, cloning or determining the presence of a nucleic acid sequence, or wherein said nucleic acid is SEQ ID NO: 4.

Group V, claim(s) 26-30, drawn to an isolated polypeptide and a method of making said polypeptide, or wherein said polypeptide is SEQ ID NO: 1.

Group VI, claim(s) 26-30, drawn to an isolated polypeptide and a method of making said polypeptide, or wherein said polypeptide is SEQ ID NO: 2.

Group VII, claim(s) 31-34, drawn to a method for influencing chlorogenic acid levels in a plant using SEQ ID NO: 3, or wherein said method results in increased levels of chlorogenic acid.

Group VIII, claim(s) 31-34, drawn to a method for influencing chlorogenic acid levels in a plant using SEQ ID NO: 4, or wherein said method results in increased levels of chlorogenic acid.

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Group IX, claim(s) 31-34, drawn to a method for influencing chlorogenic acid levels in a plant using NCBI accession number AB035183, or wherein said method results in increased levels of chlorogenic acid.

Group X, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using SEQ ID NO: 3, or wherein said method results in decreased levels of chlorogenic acid using antisense or co-suppression based mechanisms.

Group XI, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using SEQ ID NO: 4, or wherein said method results in decreased levels of chlorogenic acid using antisense or co-suppression based mechanisms.

Group XII, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using NCBI accession number AB035183, or wherein said method results in decreased levels of chlorogenic acid using antisense or co-suppression based mechanisms.

Group XIII, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using SEQ ID NO: 3, or wherein said method results in decreased levels of chlorogenic acid using double-stranded RNA based gene suppression mechanism.

Group XIV, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using SEQ ID NO: 4, or wherein said method results in decreased levels of chlorogenic acid using double-stranded RNA based gene suppression mechanism.

Group XV, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using NCBI accession number AB035183, or wherein said method results in decreased levels of chlorogenic acid using double-stranded RNA based gene suppression mechanism.

Group XVI, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using SEQ ID NO: 3, or wherein said method results in decreased levels of chlorogenic acid using ribozyme based gene suppression mechanism.

Group XVII, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using SEQ ID NO: 4, or wherein said method results in decreased levels of chlorogenic acid using ribozyme based gene suppression mechanism.

Group XVIII, claim(s) 31 and 35 drawn to a method for influencing chlorogenic acid levels in a plant using NCBI accession number AB035183, or wherein said method results in decreased levels of chlorogenic acid using ribozyme based gene suppression mechanism.

The inventions listed as Group I-XVIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature linking Groups I-XVIII appear to be a nucleic acid sequence encoding hydroxycinnamoyl-CoA quinate hydroxycinnamoyl transferase, homologous variants or sequences derived from said nucleic acid sequence comprising addition, deletion or substitution of one or more nucleotides that influence chlorogenic acid levels in a plant. However, Back (NCBI, GenBank Sequence Accession No. AF329463, Published March 2, 2001) or Kikuchi et al. (NCBI, GenBank Sequence Accession No. AB035183, Published November 27, 1999) teach nucleic acid sequences that read on variants or sequences comprising addition, deletion or substitution of one or more nucleotides of a nucleic acid sequence encoding hydroxycinnamoyl-CoA quinate hydroxycinnamoyl transferase. The property of influencing chlorogenic acid levels in a plant is inherent to the nucleic acid sequences taught in the references.

Therefore, the technical feature linking Groups I-XVIII does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over prior art.

Applicants are reminded that different nucleotide sequences and amino acid sequences are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute different inventive concepts.

Applicants are reminded that election of Groups IX, XII, XV or XVIII requires that sequence in NCBI accession number AB035183 is assigned a SEQ ID number and the sequence is included in the sequence listing. There must not be any new matter submitted, therefore it is important to be careful to include only the sequences that are already disclosed in the current specification.

Accordingly, Groups I-XVIII are not so linked by the same or a corresponding special technical feature as to form a single general inventive concepts.

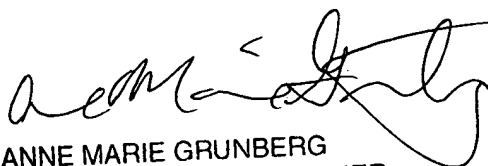
Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinod Kumar whose telephone number is (571) 272-4445. The examiner can normally be reached on 8.30 a.m. to 5.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ANNE MARIE GRUNBERG
SUPERVISORY PATENT EXAMINER